Quiz #2 (EngMath I) [Wednesday, Sept. 28, 2016]

Name: _____   Dept: _____   ID No: _____

1. (15 points) Find a particular solution of the following differential equation:

$$y'' - 2y' - 3y = 4x - 5 + 6xe^{3x}$$

2. (15 points) Solve the following initial value problem:

$$4x^2 y'' + y = 16x^2 \sqrt{x}, \quad (x > 0), \quad y(1) = 1, \quad y'(1) = 3.$$